REMARKS

The Office Action mailed May 26, 2006 has been received and the Examiner's comments carefully reviewed. Claim 19 has been amended. Claims 1-19 are currently pending. Applicants respectfully submit that the pending claims are in condition for allowance.

Rejections Under 35 U.S.C. §103

I. The Examiner rejected claim 8 under 35 U.S.C. §103(a) as being unpatentable over Harker (U.S. Patent 6,823,475) and Welch (U.S. Patent 5,218,519). Applicants respectfully traverse this rejection.

Claim 8 recites a patch panel module having a housing including a face plate and a housing side. The module also includes a module card. The module card is secured to the housing by retaining structure. The retaining structure includes a flexible latch formed on the housing side, and a hole formed in the module card.

The Examiner asserts that Welch discloses a patch panel module having a face plate, but points out, however, that Welch does not disclose a patch panel module having a housing side. Nonetheless, the Examiner states that "housing side" is read to be a side where a housing member will be located. In particular, the Examiner notes that tabs 22, 26 of Welch, while connected to the face plate 166, are on the housing side since a housing side will be located at a region perpendicular to the face plate.

To establish a prima facie case of obviousness, the prior art reference must teach or suggest all the claim limitations. Claim 8 specifically requires a latch **formed on** the housing side. The Examiner notes that Welch does not have a housing side. Clearly then Welch does not teach or suggest a latch formed on a housing side. It is impermissible to broaden the disclosure of Welch as the Examiner proposes; i.e., to modify Welch to include a latch **formed on** a housing side, if a housing side were to be placed next to the face plate of Welch. Such a modification is not taught or suggested by Welch and can only be based upon Applicant's own disclosure.

While the Examiner noted that claim 8 is rejected upon Harker and Welch, no reasons for how Harker makes up for the deficiencies of Welch have been provided by the Examiner. It is respectfully submitted that Harker does not, in fact, make up for the deficiencies of Welch, as Harker does not teach or suggest a latch formed on a housing side.

Neither Harker nor Welch teaches or suggests a latch **formed on** a housing side. Because the prior art references fail to teach or suggest all the claim limitations, as required to establish a prima face case for obviousness, Applicants respectfully submit that claim 8 is patentable.

II. The Examiner rejected claims 1-7 under 35 U.S.C. §103(a) as being unpatentable over Harris (U.S. Patent 5,546,273) in view of Welch (U.S. Patent 5,218,519). In light of the Examiner's comments, it is believed the Examiner intended to include claims 8-19 under this rejection. If this belief is incorrect, immediate notification is requested. Applicants respectfully traverse this rejection.

Harris discloses an module 160 including a heat sink 162, a circuit card 164, and a face plate 166. The heat sink 162 includes upper and lower flanges 168 and 170. The heat sink also defines grooves 172, 174 that entrap the circuit card 164 to support the circuit card 164 within the heat sink 162. The face plate 166 is secured to the heat sink 162 using hex-head screws 192.

A. Claims 1-7 and 18

1. **One-piece housing with L-shaped construction**

Claim 1 recites a module including a one-piece housing having a generally L-shaped construction. A module card is attached to the housing.

The card 164 of Harris is entrapped and supported by the heat sink 162. The heat sink 162 is made of extruded aluminum and includes flanges 168 and 170. The heat sink 162 is secured to the face plate 166 by a hex-head screw 192. Because claim 1 requires that the module card be attached to the housing, it is assumed that the Examiner is construing both the heat sink 162, which entraps the card 164, and the face plate 166 as a "housing."

The Examiner asserts that Harris discloses a housing having a generally L-shaped construction. It is not clear as to how the heat sink 162 and face plate 166 of Harris define an L-shape; nonetheless, Harris does not disclose a one-piece housing, as required by claim 1. The heat sink 162 and the face plate 166 of Harris are not one piece. Rather, the heat sink 162 and the face

plate 166 are separate components held together by screws 192. At least for this reason, Applicants respectfully submit that claim 1 is patentable.

The Examiner utilizes Welch to make up for Harris's deficiency to teach a snap-fit connection. No reasons as to how Welch makes up for the deficiencies noted above are provided. It is respectfully submitted that Welch does not, in fact, make up for the deficiencies of Welch, as Welch does not teach or suggest a one-piece housing having an L-shaped construction.

2. **Front connector of module card**

Claim 1 also requires a module card having a front connector. The front connector is positioned adjacent to a front opening of the one-piece housing. The Examiner states that the card 164 of Harris includes a front connector (element 192). Applicants respectfully note that element 192 is a hex-head screw used to fasten the face plate 166 to the heat sink 162. Element 192 is not part of the circuit card 166, as the Examiner has suggested. It is respectfully submitted that a hex-head screw, which holds together two pieces completely separate from the card, does not meet the structural limitations of a card having a front connector. Harris simply does not teach or suggest a card having a front connector, as required by claim 1.

The Examiner utilizes Welch to make up for Harris's deficiency to teach a snap-fit connection. No reasons as to how Welch makes up for the deficiencies noted above are provided. Accordingly, Applicants respectfully submit that claim 1 is patentable.

At least for any one of the above reasons, it is respectfully submit that the stated basis for the rejection of claim 1 does not establish a prima face case for obviousness; and that independent claim 1, and dependent claims 2-7 and 18 are therefore patentable.

B. Claims 8-12 and 19

1. **Front connector of module card**

Claim 8 recites a module card having a front connector. The front connector is positioned adjacent to a front opening of a housing. For similar reasons as discussed above with regards to claim 1 (Section II(A)(2)), it is respectfully submitted that claim 8 is patentable.

2. **Retaining structure**

Claim 8 also requires a flexible latch formed on a housing side and a hole formed in a module card, wherein the latch engages the hole to provide a snap-fit connection between the housing and the module card.

The Examiner notes that Harris does not disclose the recited retaining structure but that it would have been obvious to one of skill in the art to combine Welch's snap fit connection with the module of Harris for the purpose of easily securing the card to the housing without the need for extra tools.

i. Welch fails to teach a latch formed on a housing side

To establish a prima facie case of obviousness, the prior art reference must teach or suggest all the claim limitations. Claim 8 specifically requires a latch **formed on** a housing side. The Examiner notes that Welch does not have a housing side. Clearly then Welch does not teach or suggest a latch formed on a housing side. It is impermissible to broaden the disclosure of Welch as the Examiner proposes; i.e., to modify Welch to include a latch **formed on** a housing side, if a housing side were to be placed next to the face plate of Welch. Such a modification is not taught or suggested by Welch and can only be based upon Applicant's own disclosure.

ii. No motivation to combine

Furthermore, there is no motivation to modify Harris to include a snap-fit connection, as the Examiner proposes. The card 164 of Harris is entrapped by the heat sink 162. The Examiner asserts that providing a snap-fit connection will provide easy securing the card 164 to the heat sink 162 without the need for extra tools. This reasoning is, however, without basis because no extra tools are needed to entrap the card 164 of Harris within the heat sink 162. Rather, the card 164 simply slides within grooves formed in the heat sink 162, without the use of tools. The Examiner's motive to modify the heat sink 162 of Harris to include a snap-fit structure can therefore only be derived from Applicant's own disclosure and based upon impermissible hindsight reconstruction.

At least for these reasons, Applicants submit that there is no motivation to modify the heat sink 162 of Harris to include a latch that provides a snap-fit connection, as the Examiner proposes. Accordingly, it is respectfully submitted that claim 8 is patentable.

At least for any one of the above reasons, it is respectfully submit that the stated basis for the rejection of claim 8 does not establish a prima face case for obviousness; and that independent claim 8, and dependent claims 9-12 and 19 are therefore patentable.

C. Claims 13-17

1. **One-piece housing with L-shaped construction**

Claim 13 recites a method of assembling a module including providing a one-piece housing having a generally L-shaped construction. As previously discussed with regards to claim 1 (Section II(A)(1)), Applicants respectfully note that heat sink 162 and the face plate 166 of Harris are separate components, not a one-piece, L-shaped construction, as required by claim 13. At least for this reason, Applicants respectfully submit that claim 13 is patentable.

2. **Front connector of module card**

Claim 13 also recites providing a module card having a front connector. For similar reasons as discussed with regards to claim 1 (Section II(A)(2)), Applicants respectfully submit that a hex-head screw, which holds together two pieces completely separate from the card, does not meet the structural limitations required by claim 13. Therefore, Applicants submit that claim 13 is patentable.

3. **Retaining structure**

Claim 13 further recites orienting the module card in relation to a housing such that a latch formed on the housing is positioned adjacent to a hole formed in the card. For similar reasons as discussed with regards to claim 8 (Section II(B)(2)(ii)), Applicants respectfully submit that there is no motivation to modify Harris to include a latch and hole connection as the Examiner proposes; and that such motivation can only be derived from Applicant's own disclosure and based upon impermissible hindsight reconstruction. At least for these reasons, Applicants respectfully submit that claim 13 is patentable.

At least for any one of the above reasons, it is respectfully submit that the stated basis for the rejection of claim 13 does not establish a prima face case for obviousness; and that independent claim 13, and dependent claims 14-17 are therefore patentable.

SUMMARY

It is respectfully submitted that each of the presently pending claims (claims 1-19) is in condition for allowance and notification to that effect is requested. The Examiner is invited to contact Applicants' representative at the below-listed telephone number if it is believed that prosecution of this application may be assisted thereby.

Although certain arguments regarding patentability are set forth herein, there may be other arguments and reasons why the claimed invention is patentably distinct. Applicants reserve the right to raise these arguments in the future.

Respectfully submitted,

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